In the Specification

Please substitute the following amended paragraph for the pending paragraph on page 2, lines 13-22, as follows:

B1

Due to their narrow beam profile and high efficiency, photolithographically configured laser printbars have been found to provide certain advantages. Proposed laser printbars consist of an array of Vertical-Cavity Surface-Emitting Lasers (VCSELs) which may be designed with as small as 3 μm pitch. At such a pitch, a 4cm-long laser chip would accommodate more than 13,300 individually addressable laser elements, more than necessary for 1,200dpi printing on a standard 11-inch-long paper, where 13,200 elements are required. A drawback of such a large number or light sources, ultra-high density-packed, is the expectation of non-uniformity of laser responses. This non-uniformity has the potential for high spatial frequency that makes the effect on printed images noticeable to the human eye.

Please substitute the following amended paragraph for the pending paragraph on page 5, lines 5-6, as follows:

B2

Turning to FIGURE 1, illustrated is a section of a laser printbar chip (also called in the following simply a printbar) **10** having individual lasers **12** interleaved at a 3 μm pitch spacing.

Please substitute the following amended paragraph for the pending paragraph on page 14, lines 18-23, as follows:

B3

Turning to the calibration process, it is noted that in a first embodiment, calibration of lasers **12** of printbar **10** is accomplished by sensing and calibrating a single laser at a time. Particularly, sensors (**34, 34', 53, 67, 74**) are sufficiently sized to be placed in front of all lasers **12** of printbar **10**. In one calibration scheme, the imaging device is not being used to print an image during calibration. Rather, the calibration process takes place during a time when image processing is not occurring.

Please substitute the following amended paragraph for the pending paragraph on page 14, lines 24-28, as follows:

B4

In the embodiment describing the laser printbar, it is assumed sensors **53, 67, 74** are rectangular sensors of approximately 4cm by 200 micrometers, which is large enough to intercept 100% of the laser beams diverging from printbar **10**, for a substantially 4cm-long laser array. The typical divergence of the VCSEL's beam was noted to be smaller than 20°.

Please substitute the following amended paragraph for the pending paragraph on page 14, lines 29-32, as follows:

B5

The transparency of the amorphous silicon film ensures sufficient laser radiation to exit from the sensor to allow for printing while low ($10pA/cm^2$) dark leakage current of sensors **53, 67,74** maintains the contrast ratio (or light-to-dark ratio) at a high enough value for operation.

Please substitute the following amended paragraph for the pending paragraph on page 16, lines 8-11, as follows:

B6

Turning attention to FIGURE 14, a block diagram of a calibration/printing system **110**, according to the present invention is depicted. Driver chip **24** (which could also be driver chip **26**) is shown in association with printbar **10** and sensor **34**, (sensors **34', 53, 67,74** or other appropriately formed sensor may also be used).

Please substitute the following amended paragraph for the pending paragraph on page 20, lines 26-32, as follows:

B7

In a further embodiment, sensors **34, 34', 53, 67, 74** may be constructed as a plurality of sensors, into a sensor array. In this manner, instead of testing a single laser at a time, multiple lasers of multiple arrays may be tested in parallel. A drawback of using smaller sized arrays as opposed to a single sensor is that the sensor medium may age at different rates for different arrays used. An advantage is that the speed of the calibration process is increased by parallel operation and makes easier to push the calibration procedure toward real-time.